Small Business Innovation Research (SBIR) Program Overview

SBA/NCET2 Webinar Series

June 25, 2014

Program Overview

2.8% FY2013 **Small Business Innovation Research (SBIR)**: a set-aside program created by Congress in 1982 for small business concerns to engage in Federal R&D -- with potential for commercialization.

0.40% FY2013 **Small Business Technology Transfer (STTR)**: a set-aside program created by Congress in 1992 to facilitate cooperative R&D between small business concerns and U.S. research institutions -- with potential for commercialization.

SBIR and STTR were reauthorized by Congress in P.L. 112-81 for 2011 – 2017, with annual increases in the assessment of Federal extramural RDT&E funds.

Program Goals

SBIR *est. 1982*

- Stimulate technological innovation
- Use small business to meet Federal R&D needs
- Foster and encourage participation by minorities and disadvantaged persons in technological innovation
- Increase private-sector commercialization innovations derived from Federal R&D

STTR *est. 1992*

- Stimulate and foster scientific and technological innovation through cooperative research and development carried out between small business concerns and research institutions
- Foster technology transfer between small business concerns and research institutions

SBIR Program Eligibility

- Organized for- profit U.S. business
- 500 employees or fewer, including affiliates
- More than 50% directly owned and controlled by one or more individuals (who are citizens or permanent resident aliens of the United States
- PI's primary employment must be with the small business concern

New eligibility authority available to Agencies from reauthorization:

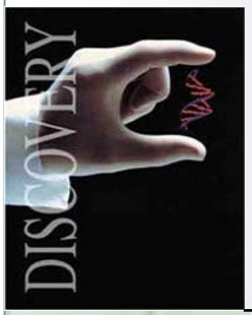
- More than 50% directly owned and controlled by one or more for-profit businesses, each being more than 50% owned and controlled by one or more individuals
- Be a concern which is more than 50% owned by **multiple** venture capital operating companies, hedge funds, private equity firms, or any combination of these. No single venture capital operating company, hedge fund, or private equity firm may own more than 50% of the concern.

STTR Program Eligibility

- Applicant is a small business concern

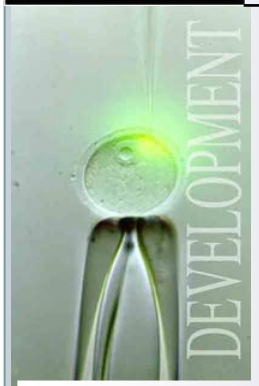
- Formal cooperative R&D effort
  - Minimum 40% by small business
  - Minimum 30% by U.S. research institution
- U.S. Research Institution
  - College or University; other non-profit research organization
  - Federal R&D center *(added by reauthorization statute)*
- Intellectual property agreement
  - Allocation of data rights for four years
  - Right to carry out follow-on R&D and commercialization via Phase III contracts and investment

SBIR/STTR: 3-Phase Competitive Program



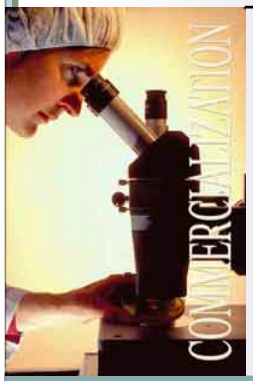
PHASE I Feasibility Study

- Award Guideline: $150K … varies by Agency … can rise to $225K
- Duration: 6 months (SBIR)/12 months (STTR)



PHASE II Full Research, R&D to Prototype

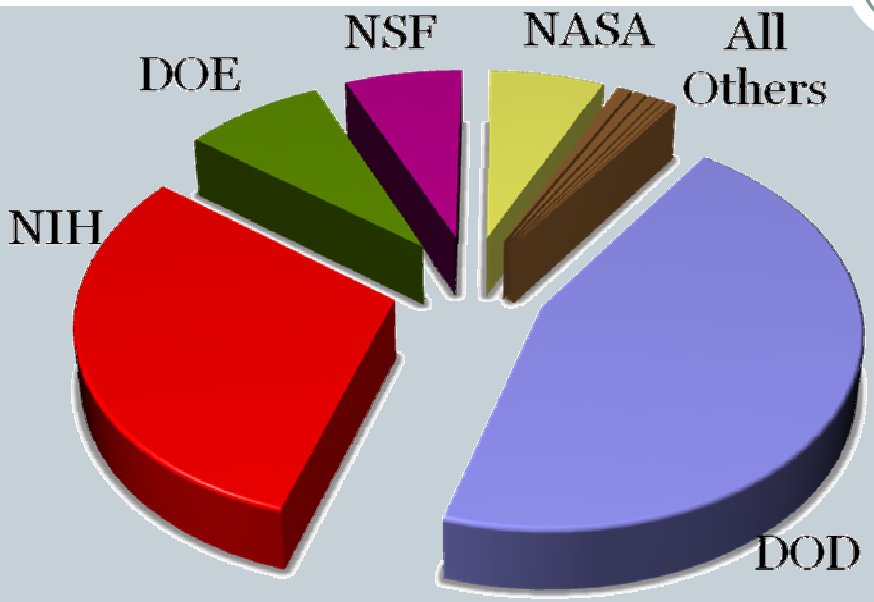
- Award Guideline: $1M (SBIR)/$1M (STTR) … varies by Agency … can rise to $1.5M, or more with waiver
- Duration: 2 years



PHASE III Commercialization

- Subsequent investment to achieve commercialization, or sale
- Use of non-SBIR/STTR Funds

SBIR/STTR Budgets by Agency, FY2013



~ $2.3B in FY13 across all agencies

Agencies with SBIR and STTR Programs	
Department of Defense (DOD)	$ 1.0 B
Department of Health and Human Services: National Institutes of Health (NIH)	$697.0 M
Department of Energy (DOE)	$183.9 M
National Science Foundation (NSF)	$153.0 M
National Aeronautics and Space Administration (NASA)	$148.8 M
Agencies with SBIR Programs	
U.S. Department of Agriculture (USDA)	$18.4 M
Department of Homeland Security (DHS): Science and Technology Directorate (S&T) and Domestic Nuclear Detection Office (DNDO)	$15.7 M
Department of Education (ED)	$13.4 M
Department of Transportation (DOT)	$7.6 M
Department of Commerce: National Oceanic and Atmospheric Administration (NOAA) and National Institute of Standards and Technology (NIST)	$7.4 M
Environmental Protection Agency (EPA)	$3.8 M

Agency SBIR/STTR Differences

- Agency mission and success metrics
- Number and timing of Solicitations over FY
- R&D Topic areas -- broad vs. specific, commercial market vs. acquisition focus
- Award type, size and structure – contract vs. grant; base-and-options, etc.
- Assistance available to awardees for commercialization
- Government technical monitor (TPOC) role
- Financial details (e.g., Indirect Cost Rates, Gap Funding)
- Proposal preparation instructions, receipt dates and review process

ADVANTAGES

- Government's venture capital program
- Risk free dollars
- No black marks for failure
- No equity position
- Company retains full data rights
- Government must protect data rights for up to four years following project close
- Priority position for sole source sales to government

Very competitive program but well worth considering

Agency SBIR Differences

Contracting Agencies

- Ü Agency establishes plans, protocols, requirements
- Ü Highly focused topics
- Ü Procurement capability
- Ü More fiscal requirements

Granting Agencies

- Ü Investigator initiates approach
- Ü Less-specified topics
- Ü Assistance mechanism
- Ü More flexibility

NIH offers both grants and contracts

DOD
EPA
DOT
HHS/NIH

DHS
NASA
DOC

DOE
ED
HHS/NIH

NSF
USDA

CROWDFUNDING

- **What is it?**
  - **“..collective cooperation, attention and trust by people who network and pool their money and other resources together, usually via the internet, to support efforts initiated by other people or organizations” (Wikipedia)**

JOBS ACT 2012

- What is crowdfunding in relation to the JOBS ACT of 2012?
  - Moving from donations and rewards based to equity based – selling small pieces of your company to many investors

TYPES OF CROWDFUNDING

- Four general categories:
  - Equity based (primarily in Europe but coming in the US under the implementation of the 2012 JOBS ACT; AngelList, CircleUp, CrowdFunder, GrowVenture, MicroVentures)
  - Donation based
  - Lending based (P2P, Lending Club, P2B, SoMoLend, Endurance Lending Network, OnDeckCapital)
  - Reward Based (non-monetary – Kickstarter, Indiegogo, Rockethub, Peerbacker)

PLATFORMS

- Number worldwide – 931 (Sally Outlaw, Peerbacker) to 2679 (depending how and who is doing the counting)
- 2013 Total Funding - $4.9 Billion (Crowd Data Center)
- 2013 Total known deals – 120,000
- Number of backers – Hard to pin down but look at Kickstarter alone: 2013 – 3 Million
- Success rates: Kickstarter – 44%; Indiegogo – 14%
- Technology campaigns – Kickstarter – 9%; Indiegogo – 4%
- Future projection: 2025 - $90 Billion (World Bank 2013)

WHY CROWDFUND

- Among the more important reasons:
  - Market validation
  - Product promotion
  - Product exposure
  - Time limitations

FAD OR ENDURING

- You make the call but consider the following:
  - Professional investors 'pouring in'; examples include **Indiegogo** $40M Series B, Kleiner Perkins, January 2014 followed by undisclosed Series C May 2014 Branson, Lavchin, Webb, Smith; **Lending Club**, undisclosed amount at $2.3B valuation, Norwest, Canaan, Union Square) followed by Google, Kleiner Perkins, Jack Mack; **Crowdtilt** Series B December 2013 $23M; **Prosper Marketplace** $95M Sequoia, Blackrock, Institutional Venture, Francisco Partners, Phenomen.
  - **University platform partnerships**: UVA, ASU, Cornell, Delaware, Washington with Useed; Utah with Rockethub; Southern Illinois, Maryland with Launcht; California with Crowdfund; UCLA with Spark.

PROJECT EXAMPLES

- Oculus VR – Target $250K (virtual headset); Actual $2.4M; 30 days; 9522 backers. Acquired by Facebook April 2014 $2B. Kickstarter.
- Solar Roadways – Target $1M; Actual $2.1M; 46981 backers. Indiegogo
- Scanadu Scout (medical tricorder linked to phone)– Target $100K; Actual $1.6M. Kickstarter. Series A $10M
- FormLabs (3-D printer; MIT spin-off) – Target $100K; Actual $2.9M. Series A $19M. Kickstarter

IS IT EASY?

- NO, REQUIRES JUST AS MUCH IF NOT MORE DEDICATION, COMMITMENT, SWEAT AND TEARS AS VENTURE CAPITAL FINANCING
- IF IT IS EQUITY, IT IS FAR MORE EXPENSIVE THAN TRADITIONAL REG D FINIANCING
- PREPARATION, PREPARATION, PREPARATION